Autism

Autism is a difference in how your child's brain works that causes them to socialize and behave in unique ways. Early signs of autism include limited eye contact and body language and repetitive motions or speech. Behavioral therapies and other support can help autistic kids (and adults) make the most of their strengths and manage any challenges.

Overview

What is autism?

Autism is a difference in how your child's brain works that shapes how they interact with the world around them. This difference is something they're born with — it has nothing to do with your parenting style, foods, vaccines or anything else your child encountered after birth. We don't know exactly why some people are autistic and others aren't, but we do know:

- **Autism isn't a disease**. This is important because we try to "cure" diseases. With autism, the goal isn't a cure. Instead, we find ways to help your child identify and make the most of their strengths while managing any challenges they might face.
- **Autistic people are neurodivergent**. Neurodivergent is a word that describes people whose brains are different than what's "typical," or expected. They may excel more in certain areas and need more support in other areas compared to their neurotypical peers.
- **Autism is a spectrum**. Everyone on this planet is unique — and that fact doesn't change when we're talking about autistic kids (or adults). Autism is a spectrum in the sense that there's a *very* wide range of personality traits, strengths and challenges you might have when you're autistic — just as there is

for any other person.

- **Autism is often misunderstood**. For decades, people (including doctors) have said and done things that we now know are wrong or even harmful to autistic people. For example, early forms of behavioral therapy used strict methods to try and get kids to act and talk like their peers. We can't erase this history, but we've learned from it. Today's therapies help autistic kids and their families gain skills without forcing kids to fit into a certain mold. But plenty of autism myths still exist, and it takes time to get the truth out there.

When discussing autism, it's important to acknowledge that words aren't perfect. And sometimes, "medspeak" that healthcare providers use — like disorder, symptoms or diagnosis — doesn't quite match the lived experience of autistic people or their families. Throughout this article, we'll use such language as needed to describe how healthcare providers can support your family — while recognizing that autism is an identity, not just a diagnosis.

What is autism spectrum disorder?

Autism spectrum disorder (ASD) is the full medical name for autism. A book called the DSM-5-TR defines autism spectrum disorder as a difference in brain functioning that affects how a

person communicates and interacts with others. For example, an autistic person may not use eye contact or body language in the same ways as someone who's neurotypical.

This brain difference also affects various aspects of a person's behavior, interests or activities. For example, they may repeat the same movements or sounds (a behavior known as "stimming") to regulate their emotions. They may also prefer a fixed routine and value sameness over change.

How common is ASD?

About 1 in every 36 kids in the U.S. are autistic. This is based on data gathered in the U.S. in 2020.

It might seem like autism is becoming more common. But the increasing prevalence is likely because healthcare providers have better knowledge and resources than in the past. So, they're better able to identify and support autistic people, which leads to more office visits and diagnoses — and a rise in the numbers.

What are the signs and symptoms of autism?

Autism symptoms — more accurately called characteristics — are specific behaviors that healthcare providers look for when diagnosing

autism and deciding what kinds of support your child might need. There are many autism characteristics, and no two kids share the exact same ones. Providers organize these characteristics into two main categories:

- Difficulties with social communication and interaction. These affect how your child socializes.
- Restricted and repetitive behaviors, interests or activities. These affect how your child acts.

As a parent, you're probably used to looking for signs that something isn't right – like a fever or swollen glands. But autism characteristics aren't signs that something's *wrong* — rather, they're signs of difference. And they're cues that your child may need some support to manage society's expectations and demands, which are often designed for neurotypical people.

Signs of autism fall into two groups: difficulties with socializing and restrictive and repetitive behaviors, interests or activities.

How your child socializes

Socializing at age 2 is a lot different than socializing at age 5, 10 or 15. So, what these difficulties look like in your child can vary widely

according to their age and a host of other factors — including other conditions they might have that affect their communication.

You may notice your toddler:

- Doesn't follow your gaze or look at things you're pointing to.
- Doesn't respond to their name.
- Seems uninterested in taking-turn games like peek-a-boo.
- Doesn't seek you out to share something they've discovered.
- Looks away rather than looking you in the eye.
- Uses your hand as a tool to pick up things they want.
- Prefers to play by themselves (continuing beyond age 2).

You may notice your older child:

- Talks about a narrow range of topics.
- Has one-sided conversations (no back-and-forth).
- Seems uninterested in starting a conversation.
- Has difficulty expressing their feelings or understanding how others feel.

- Has difficulty using and understanding body language — for example, they might face away from someone when speaking to them.
- Speaks in a monotone or sing-song voice.
- Has difficulty noticing social cues.

You may notice your adolescent:

- Has trouble understanding what others mean — for example, they might not recognize sarcasm.
- Doesn't initiate social interactions.
- Makes little or no eye contact.
- Has difficulty mixing spoken words and body language.
- Has a hard time building relationships with peers.
- Gets along more easily with younger kids or grown-ups.
- Has difficulty seeing something from someone else's point of view.
- Doesn't understand certain social rules like greetings or personal space.
- Appears standoffish when around others.

How your child acts

You may notice your toddler:

- Repeats the same words or phrases (echolalia).
- Repeats the same motions — like flapping their hands, rocking their body or spinning in circles.
- Does the same thing over and over with a toy or part of a toy — like spinning the wheels of a toy car.
- Gets very upset by changes to their routine.
- Lines toys or objects up in a particular order and resists anyone changing it.
- Won't eat foods of certain textures.
- Reacts strongly to certain fabrics or other things on their skin.
- Shows strong interest in a specific object you wouldn't expect, like a wooden spoon or fan.

You may notice your older child or adolescent:

- Repeats certain words or phrases from books, movies or TV shows.
- Has difficulty transitioning between tasks.
- Strongly prefers familiar routines or patterns of behavior.
- Has intense or highly focused interests — like certain topics or collections.

There's not always a clear line between what's a

feature of autism and what's a kid simply being a kid. Lots of the things above are true for all children at one point or another. But with autism, these behaviors may pose challenges for your child in certain settings, like school or, down the road, work.

What strengths do autistic people have?

Strengths are unique to each person, and research has found a wide range of strengths among autistic people. Your child may have:

- The strength to speak out or "go against the crowd" even if it's not the popular thing to do.
- A strong sense of right vs. wrong, leading them to follow their moral compass even when no one's watching.
- The ability to express themselves directly and honestly.
- A knack for connecting with people of all ages.
- The ability to focus for long periods of time and gain expertise on a topic.
- Strong nonverbal reasoning skills.

What causes autism?

Researchers haven't found a single cause of autism. It's likely a combination of genetics and certain things related to pregnancy, labor and delivery (what you might see referred to as "environmental factors" or "prenatal events"). These factors all interact to lead to the brain differences we see in autism.

Specific things that may make autism more likely in your child include:

- Becoming pregnant over age 35.
- Becoming pregnant within 12 months of having another baby.
- Having gestational diabetes.
- Having bleeding during pregnancy.
- Using certain medications (like valproate) while pregnant.
- Smaller than expected fetal size (intrauterine growth restriction).
- Reduced oxygen to the fetus during pregnancy or delivery.
- Giving birth early.

These factors may directly change how your baby's brain develops. Or they may affect how certain genes work, in turn leading to brain differences.

Is autism genetic?

Yes — but the genetic causes of autism are complicated. There's not a single, specific gene variation that's unique to autism. This makes autism different from some other genetic conditions, like cystic fibrosis, where providers can pinpoint a specific gene variation and say, "ah!", there it is.

Instead, *many* gene variations are linked to autism. This means autistic people might have one or more gene variations that play a role in their brain differences.

Not all autistic people have a clear genetic cause. For example, genetic testing for your child may reveal no gene variations associated with autism. This finding doesn't change their diagnosis. And it doesn't rule out a genetic cause. It's possible that other gene variations contribute to autism, and researchers simply haven't identified them yet.

Is autism inherited?

It can be. It's easy to confuse genetics with inheritance. When we say autism is genetic, we mean variations in certain genes affect how your baby's brain works. Those gene variations might pop up for the first time in your baby — in this case, they're not inherited. But it's also possible

for biological parents to pass down gene variations to their children. We think autism can be inherited because we see patterns among siblings.

With autism, inheritance sometimes happens in the form of genetic syndromes. There's a higher prevalence of autism in some genetic syndromes, like fragile X syndrome, Down syndrome and tuberous sclerosis. With these syndromes, your child is autistic but also has a wide range of other developmental changes. Each syndrome is passed down through the generations in specific ways — for example, through one or both biological parents.

What's involved in getting an autism diagnosis?

Healthcare providers diagnose autism by talking to you about your observations and interacting with your child. Diagnosis is a team effort, and you and your child are central members of that team.

The process of getting a diagnosis starts with a screening. This is simply a set of questions your pediatrician asks you about your child. You'll fill out a form and then talk to your pediatrician about your answers. Autism screenings happen at your child's 18-month and 24-month well-

checks.

If your pediatrician notices possible signs of autism, they'll refer you to a provider who specializes in diagnosing autism. This specialist will talk further with you and spend some time observing and interacting with your child. They'll look for specific symptoms (characteristics) typical of autism.

Providers use the criteria listed in the DSM-5-TR. This diagnostic manual breaks down symptoms into the two main categories discussed earlier: how your child socializes and how they act. Let's dive a little deeper into how providers reach a diagnosis.

Criteria for an autism diagnosis

Your child must have difficulties in *all three* of the following social areas:

- **Social-emotional reciprocity**. This is the back-and-forth nature of socializing. The most common example is a conversation. One person says something, and the other person responds. Autistic kids may engage in such give-and-take socializing less than expected.
- **Nonverbal communication**. These are things like eye contact and body language — movements and subtle gestures that add

meaning to the words we say. Autistic children may not use these cues in expected ways, and/or they may not understand what others mean by them.

- **Developing and maintaining relationships**. This involves seeking people to spend time with and sharing interests together. It also involves judging how to approach others and which behaviors are appropriate in different situations. Autistic kids may not initiate or develop friendships in ways their neurotypical peers expect.

AND your child must do *at least two* of the following:

- **Engage in repetitive movements, use of objects or speech**. This means doing or saying the same thing over and over, more than you might expect. For example, your child might repeatedly make the same hand motions, move one part of a toy or say a certain phrase.
- **Insist on the same routine or ways of doing things**. This means relying heavily on sameness and resisting change. Your child may want to do tasks a certain way or in a particular order and get upset by attempts to do things differently.
- **Have very intense or unusual interests**. This

is interest in a certain object or topic that's stronger or more consuming than you'd expect. For example, you might not be surprised if your child loves superhero cartoons, but an intense interest would mean that's all your child wants to watch or talk about.

- **React more than expected to sights, sounds and textures and/or seek out sensory experiences**. Reacting more than expected (hyper-reactivity) means getting overwhelmed or upset by sensory input like big crowds, loud noises and certain textures. On the flipside, some kids seek out sensory experiences because they're *under*whelmed by what's around them. This involves sniffing or touching certain objects for longer (or more often) than other kids might.

Is there an autism test?

There aren't any lab tests or specific markers for autism. Providers may do genetic testing to check for gene variations associated with autism. But this isn't a diagnostic test for autism — instead, the genetic tests may help narrow down the cause of your child's brain differences. Knowing this information can help providers tailor support to your child's needs.

When seeking a diagnosis, it helps to see a

developmental pediatrician, who's trained to recognize autism. They can administer a standardized assessment like the Autism Diagnostic Observation Schedule (ADOS), which may help clarify the diagnosis of ASD.

What should I know about autism treatment?

Because autism isn't a disease, providers don't "treat" it. After all, it isn't something that "goes away" or can be "cured." It's simply the way your child's brain works. And it's a part of their identity that'll always remain in some form — even if certain characteristics become more or less noticeable over time.

But providers *do* manage the aspects of autism that may pose challenges for your child or keep them from maximizing their strengths. Management involves a range of therapies that help your child build skills (like social communication) they'll need now and in the future. Some therapies teach you and other family members strategies for supporting your child. The earlier such support begins (ideally before age 3), the more it can benefit your child in the long run.

Examples of specific therapies include:

- Behavioral therapies, like applied behavior

analysis (ABA).

- Family therapy.
- Speech therapy.
- Occupational therapy.

Treatment for co-occurring conditions

Some autistic kids have other conditions that need support or treatment. Conditions that may co-occur with autism include:

- Attention-deficit/hyperactivity disorder (ADHD).
- Anxiety disorders.
- Avoidant/restrictive food intake disorder (ARFID).
- Conduct disorder or oppositional defiant disorder.
- Bipolar disorders.
- Depressive disorders.
- Digestive issues, like constipation.
- Epilepsy.
- Intellectual disabilities.
- Obsessive-compulsive disorder (OCD).
- Schizophrenia spectrum disorder.

- Sleep disorders.

Providers manage or treat these conditions with things like:

- Cognitive behavioral therapy (CBT).
- Medications.
- Referrals for educational support — for example, to create an Individualized Education Plan (IEP) to meet your child's learning needs.

Additional Common Questions

Is ASD a neurodevelopmental disorder?

Yes. ASD falls within the larger, umbrella category of neurodevelopmental disorders. These are conditions affecting a child's brain function that become noticeable very early in life — often before or soon after starting school.

Some kids with ASD also have other neurodevelopmental disorders, like attention-deficit/ hyperactivity disorder (ADHD) or an

intellectual disability.

In the past, providers used several different names to describe neurodevelopmental disorders with features of autism:

- Autistic disorder.
- Asperger's disorder.
- Pervasive developmental disorder not otherwise specified (PDD-NOS).
- Childhood disintegrative disorder.

Providers now recognize that autism is a spectrum with a wide range of features, and autistic kids need varying levels of support. So, instead of using these other names, providers use ASD as the official diagnosis and then describe specific features and needs unique to each child.

A note from Cleveland Clinic

Being a parent is a lot like being a student — you're constantly learning, growing and changing. And so is your child. But there's no textbook. You learn from your child and all their various needs, wants and interests.

If your child is autistic, your learning might look a little different than you'd expected. But it's still the same, basic idea — your child is taking the

lead and you're following their cues. It may help to remember this isn't an "independent study." Your child's healthcare providers are right there with your family for each new challenge or discovery.

Medically Reviewed

Last reviewed on 10/01/2024.

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